

REMARKS**I. Prosecution History.**

Claims 1-78 were originally submitted for examination with filing of the present nonprovisional patent application, which claims priority to provisional patent application 60/214,339 filed June 27, 2000. Four groups of claims were identified in a four-way restriction, of which Applicant selected Group I, Claims 1-31, for examination. Claims 32-78 remain withdrawn from examination.

In the first Office Action, the elected claims, 1-31, were rejected by the Examiner under 35 U.S.C. §102(e) and §103(a). More particularly, Claims 1 - 11 and 14 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,625,580 (hereinafter referred to as "Tayama"), while Claims 12 was rejected under 35 U.S.C. §103(a) as being unpatentable over Tayama in view of U.S. Patent No. 6,076,167 issued to Borza (hereinafter referred to as "Borza"), and 13 and 15-31 were rejected under 35 U.S.C. §103(a) as being unpatentable over Tayama in view of U. S. Patent No. 6,360,101 issued to Irvin (hereinafter referred to as "Irvin"). In response, the applicant amended Claims 1-2, 4-9, 13-19, 22, 25-32; and added new claims 79-104.

In the second Office Action dated 8/12/04, made Final, the Examiner rejected claims 1-4, 30, 31, 79, 80, 82, 83, 85-86, 89-93 and 98-105 under 35 U.S.C. §102(e) as being anticipated by *Eldridge et al.* Claims 5, 87 95 and 96 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge et al* in view of *Kaplan*. Claims 6-9, 13, 15-20,22-24,26,28 and 29 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer et al.* Claims 10 and 21 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Challener et al.* Claim 12 was rejected under 35 U. S. C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer*, and further in view of *Borza*. Claim 14 was rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Ronen*. Claims 81 was rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Boyle*. Claims 88 and 94 was rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Magro et al.* Claims 11 was rejected under

35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer*, and further in view of *Magro*. Claims 25 and 27 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer*, and further in view of *Kaplan*. Finally, claim 97 was rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Kaplan*, and further in view of *Magro*.

An RCE was filed by Applicant on January 12, 2005 together with a preliminary amendment in response to the Final Office Action. In the preliminary amendment, claims 5, 25-29, 83-87, 95, 96 and 103 were cancelled and claims 1, 7, 8, 15-19, 30, 31 79 and 100 were amended. Claims 1-4, 7-24, 30, 31, 79-82, 88-94, 97-102, and 104-105 remained pending in the application. Claims 32-78 remained withdrawn.

A First Office Action following the RCE filing is dated April, 22, 2005 was received. In the official action claims 1-4, 6-9, 13, 15-20, 22-24, 30, 31, 79, 80, 82, 89-93, 98-102, 104 and 105 stood rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer*. Claims 10 and 21 stood rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer* and further in view of *Challener et al.* Claims 11, 88, 94 and 97 stood rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer* further in view of *Magro et al.* Claims 12 stood rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer* further in view of *Borza et al.* Claims 14 stood rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer* further in view of *Ronen et al.* Claims 81 stood rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer* further in view of *Boyle et al.*

In response to the First office action, claims 4-6, 13, 24-29, 79-87, 95-96 and 101-104 were cancelled by Applicant. Applicant has amended claims 1-2, 7-8, 10-12, 14-16, 30, 97 and 100. New claims 106-112 were added.

In response to the Amendment to the first office action, a Second Official Action, made FINAL, was been rendered on November 23, 2005. Claims 1-3, 7-12, 14-23, 30, 31, 88-94, 97-100 and 105-117 were rejected under the Second Office action. References cited to reject the claims under 35 U.S.C. 102

and 35 U.S.C. 103 include Yocoub (US Published Application 2003/0011805) and Eldridge et al (US Patent 6,515,988).

In response to the Final Rejection, on February 23, 2006 Applicant filed an amendment to the claims and presented remarks distinguishing the cited art from the claims. On 3/27/2006 an advisory action was issued by the Examiner indicating that amendments would not be entered.

On April 21, 2006, Applicant filed another RCE and included the un-entered amendment from 2/23/2006 as his submission with the RCE.

On July 17, 2006, a first office action was rendered by the Examiner. Under the first office action, claims 1-3, 7-9, 15-20, 22, 23, 30, 31, 89-93, 98-100, 105-107, 112, 113 and 115-117 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Theimer et al (U.S. Patent No. 5,793,630) in view of Robertson (U.S. Pub. No. 2001/0047441). Claims 10, 21 and 114 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Theimer in view of Robertson and further in view of Challener et al (U.S. Patent No. 6,591,297). Claims 11, 88, 94 and 97 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Theimer et al in view of Robertson and further in view of Magro et al (U.S. Patent No. 6,457,078). Claim 14 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Theimer et al in view of Robertson and further in view of Ronen (U.S. Pub. No. 2002/0156708). Claims 108-111 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Theimer et al in view of Robertson and further in view of Yacoub et al (U.S. Pub. No. 2003/0011805). Applicant submitted a response and amendment on November 20, 2006 for the purpose of clarifying the claims and distinguishing the invention from cited reference of record.

A Final office action was received, dated February 22, 2007, wherein claims 1, 15, 30 and 100 stood objected to ; claims 1-2, 7-9, 15-20, 22, 223 30, 31 89-93, 98-100, 105-113 and 115-117 stood rejected as being unpatentable over Theimer in View of Haartsen (US Patent no. 6,574,266); claims 10, 21 and 114 stood rejected as being unpatentable over Theimer in view of Haartsen and further in view of Challener et al; and claim 11, 88, 94 and 97 stood

rejected as being unpatentable over Theimer in view of Haarsten and further in view of Margo et al.

In response to the latest final rejection, Applicant submitted an amended independent on May 22, 2007, to claims 1, 15, 30 and 100 to overcome a minor objection by eliminating the redundant word "an" from the claims; otherwise, additional substantive amendment of the claims was not seen as necessary given the teachings of Theimer and Haartsen, which were the primary references against Applicant's claims. Therefore, Applicant submitted remarks pointing out the distinctions between his invention and the cited art.

An Advisory Action dated 5/31/2007 was received from the Office wherein the minor amendment was entered, but the rejections based on Theimer and Haartsen were maintained.

Applicant has amended his independent claims to provide more yet more clarification for the Office. Reconsideration is respectfully requested.

II. Features of the Invention Summarized.

Before June 2000, when Applicant conceived of the present invention, his profession kept him very busy traveling throughout the United States. There were times when it would have been useful to see a larger image or produce a printout of a document while waiting in Airports for connecting flights. No system or method was then publicly available for business travelers to quickly locate and then go to and render (e.g., either see or print) a document stored on Applicant's handheld PDA (Palm PDA) within the public airports or throughout metropolitan areas that Applicant was traveling within. The need to find a publicly available device using a wireless handheld device with public network communications that could print, display or record (upload/download) data seemed to be clear at that point in time for Applicant. The idea of having a telecommunications service provider or internet service help a traveler find a "data rendering device" following a network request by a wireless handheld device was conceived. Additionally, the ability to locate a public device based on the handheld device (user's) physical location was also conceived.

Applicant filed his provisional patent application in June 2000, which covered these and other novel features. Upon conversion of the provisional into a non-provisional patent application one year later in June 2001, there still was no such public data rendering device locating service available to the business traveler. Today, June 22, 2007, Applicant cannot use his wireless handheld device (a Blackberry data communicator with email capabilities) to ask his telecommunications service provider (T-Mobile) or a Internet service Provider (e.g., PrinterOn.com) to help him find a publicly available printer or display so that he can actually view the electronic documents (e.g., PDF and Word) that are attached to email messages received on his wireless handheld device. Applicant has experienced many other Blackberry, Palm PDA or Smartphone users that are having trouble viewing documents using their handheld devices and must simply wait until the documents can be viewed at their homes or offices over a desktop computer or printed out using their dedicated printing resource.

A need still exists for the invention claimed by Applicant. The prior art cited in the prosecution history does not teach or suggest system and methods to held handheld device user request a service provider to help the user locate and send data to a publicly available data rendering device (e.g., printer or display) where the data rendering device's location was not previously known by the user (e.g., it is publicly available and undedicated, as is the case with hundreds or thousands of ATM machines located throughout a city).

Independent claim 1, 15, 30, 100 and 106 claim variations of Applicant's invention but commonly include methods that enable handheld wireless device users to request assistance from public wireless communications hardware and associated networks to locate a publicly accessible data rendering devices, such as video monitor, an Internet Kiosk, a multimedia projector, or an ATM machine, that has not previously been assigned to the WD and are physically located in a publicly location that is accessible to the wireless device user.

DRDs in accordance with the teaching of Applications invention are truly public in that their location is often not already known by or considered by the handheld device user when requesting the assistance of a network to find one,

and the DRD is made available to the public at large, meaning that it is an unassigned or undedicated resource (in other words the mobile handheld wireless device users has not idea where most publicly available DRDs are within a city or public place, so one or many DRD must be located for the user with the help of public telecommunications equipment and associated networks, and location is based on the handheld device user's physical location and/or profile).

The cited art does not offer the important feature of the present invention is that provides that wireless device users can use their WD and supporting network resources to locate publicly available DRDs whose location is not previously known to the user or the WD, and location is based on at least one of the WD's geographic location and/or a user profile.

WD users can request the public wireless network resource supporting the WD to transfer data to the DRD over networks. The data associated with the wireless device can be obtained from memory or a mailbox associated with the wireless device user and accessible by the network supporting the WD.

Yet another important feature of the present invention is that wireless devices can be used to: control unassigned, user accessible data rendering device; manipulate data after it is transferred to the unassigned user accessible data rendering device before or during data rendering; and check the operational readiness of data rendering devices before or during data rendering.

Public data networks and servers (e.g., telecommunications provider equipment) can be utilized to coordinate data rendering device location based on wireless device location, delivery of data to data rendering devices, and access to data rendering devices. Pass codes and encryption can be used to permit the rendering of data at DRDs.

Applicant's claims as amended fully support the above-described methods and capabilities and are supported by the extensive specification submitted by Applicant.

III. Rejection of claims over Theimer in view of Haartsen.

Claims 1-2, 7-9, 15-20, 22, 23, 30, 31 89-93, 98-100, 105-113 and 115-117 stand rejected as being unpatentable over Theimer in View of Haartsen (US Patent no. 6,574,266); claims 10, 21 and 114 stand rejected as being unpatentable over Theimer in view of Haartsen and further in view of Challener et al; and claims 11, 88, 94 and 97 stand rejected as being unpatentable over Theimer in view of Haarsten and further in view of Margo et al.

Applicant will focus his arguments in addressing the patentability of independent claims 1, 15, 30, 100 and 106.

Applicant believes it would be helpful to summarize and characterize the newest primary references, *Theimer et al* (U.S. Patent No. 5,793,630) in view of *Haartsen* (U.S. Patent No. 6,574,266), which are being cited against all of his independent claims.

Theimer et al.

Theimer et al ("Theimer") is directed at a system for transferring digital information between "spatially localizable" electronic devices (including portable devices) using a supporting wireless communication network *that is not "Public" but is actually dedicated to the devices*.

Theimer is actually only interested in submeter applications and specifically suggests at Column 2, lines 8-13 that it is preferable that:

"a range of spatial locations and orientations can be specified with transmission to adjacent electronic devices, to all electronic devices in a room, to all electronic devices in a particular orientation or direction, or even to all electronic devices at spatial locations within a specified range (e.g., within two meters)."

Theimer goes further by states that a user of the electronic devices (e.g., located within the same room) can "define electronic data transfers between portable electronic devices in user determined spatial locations with submeter precision."

By admission in *Theimer's Abstract*, Specification and even as illustrated in figures 1 and 2, handheld device users do not need to request the assistance of public wireless communications network providers or hardware to help the user through the user's wireless device (WD) find publicly accessible data rendering devices. In fact, the user knows exactly where the devices are in order to define them spatially for communications purposes, which is taught throughout *Theimer*. *Theimer* actually teaches away from applicant's claimed invention when *Theimer* suggests that its features are most evidently advantageous when used in submeter applications and shows examples within the same physical space (i.e., a room) where IR transmitters and CCD cameras enable highly precise spatial location of tagged electronic devices.

Haartsen

Haartsen is cited in combination with *Theimer*. *Haartsen* superficially teaches a communications system conduit for transferring data between a single electronic device (e.g., Kiosk) to various user hand held devices. *Haartsen* is focused on short range applications, which teaches away from Applicant's invention.

Haartsen is actually cited by Examiner for its teaching of Bluetooth™ communications principles. Bluetooth™ is yet another "short range" technology which would not be very helpful in accomplishing the features claimed by Applicant. Bluetooth™ devices are known to have a limited effective range up to about 32 feet (10 meters).

At 32 feet, isn't it clear that the wireless device user should already know the location of the DRD and won't be requiring telecommunications service provider or Internet service provider assistance to locate it?

Theimer combined with Haartsen

To the extent Haartsen is being cited for its teaching of Bluetooth™ communications and Theimer is suggesting that operation within 2 meters is preferable, it becomes clear that there is confusion regarding the scope of Applicant's claims, which is why they have now been amended. Theimer and Haartsen in combination are focused on "short range" applications and alone, or in combination, teach away from Applicant's invention.

Theimer and Haartsen are both required to support the 35 U.S.C. §103(a) rejections against all of the pending claims; yet it seems clear that neither actually teach or suggest the key inventive aspects claimed by Applicant. Independent claims 1, 15, 30, 100 and 106 have been amended and are rewritten below for reference:

1. (Currently amended) A method of brokering data between handheld wireless devices and publicly available data rendering devices whose locations and identities are not previously known to the handheld wireless devices or its users, comprising:

identifying data from a handheld wireless device (WD) for rendering at a publicly accessible data rendering device (DRD) wherein said DRD has a publicly accessible location not yet known to the WD or its user;

providing a request to locate at least one DRD, said at least one DRD further comprising at least one of a video monitor, an Internet Kiosk, a multimedia projector, or an ATM machine, said request provided from said WD through a telecommunications network supporting data communications by the WD to a public data communications network, said network resource adapted to identify the location of at least one DRD in accordance with at least one of said WD's geographic location and a WD user profile associated with said WD;

said network resource identifying the location of to locate at least one DRD based on at least one of said WD's location and matching said WD user profile;

said network resource providing said WD location information for at least one publicly accessible DRD in accordance with at least one criterion of

the at least one publicly accessible DRD location located near said WD and said at least one publicly accessible DRD matching said WD user profile;
selecting a DRD with said WD; and
transferring said data at the request of said WD to said DRD for rendering from a memory associated with the WD, said data transferred to said DRD for rendering.

15. (Currently amended) A method of brokering data between a wireless device (WD) and a publicly accessible data rendering device (DRD), said DRD further comprising at least one of a video monitor, an Internet Kiosk, a multimedia projector, or an ATM machine, wherein said DRD is not assigned to the WD, said DRD's physical location is not known by the WD or its user, and said DRD is publicly accessible to all WD users, wherein a WD user performs the following steps at said WD:

identifying data with said WD to render at a publicly accessible DRD;
entering a DRD locator request with said WD to public communications network resources through a public wireless communications network supporting data communications by said WD, said public communications network resources including public wireless network communications hardware and associated data communications hardware and networks, said request being for said public wireless communication network resources, said DRD locator request being for said public communication network resources to find at least one DRD located near the WD, said locator request including WD location information;

receiving DRD location information at said WD for the at least one publicly accessible DRD located near the WD, wherein said DRD's location information is based on said WD location information;

selecting a DRD with said WD for rendering said data;
physically locating the DRD at the DRD's publicly accessible location;
and

requesting at said WD that said data be transferred to said DRD through at least one of said public wireless communications network resources and a short range wireless communications link with said DRD.

30.(Currently amended) A method of brokering data between wireless devices and publicly accessible data rendering devices, comprising enabling a user of a wireless device to perform the following steps:

using a wireless device (WD) to request support through public wireless network communications network hardware and an associated public wireless communications network to a remote server to locate at least one publicly accessible data rendering device (DRD), said remote server including publicly accessible DRD location information and adapted to support WD users in locating at least one publicly accessible data rendering device (DRD) by a request through the WD user's WD, wherein publicly accessible DRD information stored in said remote server further comprises information for DRDs including at least one of a video monitor, an Internet Kiosk, a multimedia projector, or an ATM machine, and wherein said at least one DRD is not previously being assigned to said WD and its location not previously known to said WD or its user, and said at least one DRD is physically accessible to a WD user of said WD, wherein locating of at least one DRD is executed by said remote server in cooperation with said public wireless network communications hardware and associated public wireless communications network in accordance with at least one of a WD user profile located in at least one of said WD, said public wireless network communications hardware and associated public wireless communications network and the geographic location of said WD;

receiving DRD location information at the WD for the at least one DRD located near the WD;

selecting a DRD with said WD for rendering data;

selecting data with said WD for rendering at the DRD; and

providing said data, at the request of said WD via said public wireless network communications hardware and associated public wireless communications network supporting said WD, to said DRD for rendering.

100.(Currently amended) A method using public wireless network communications hardware and an associated public wireless communications network adapted for supporting wireless hand held device users in brokering data between handheld wireless devices and publicly

accessible data rendering devices, steps of the method carried out by a hand held wireless device user comprising:

providing a request to a network resource to locate at least one publicly accessible data rendering device (DRD) further comprising at least one of a video monitor, an Internet Kiosk, a multimedia projector, or an ATM machine, said DRD for rendering the data, said request provided through a hand held wireless device (WD) and a public wireless communications network supporting wireless communication by said WD to a network resource adapted for providing assistance to hand held wireless devices in locating publicly accessible DRDs by determining the WD's geographic location, locating at least one DRD located near said WD based on its geographic location and identifying at least one DRD to said WD;

receiving location information for at least one publicly accessible DRD at said WD from the network resource through said public wireless communications network supporting wireless communication by said WD, said location information identifying at least one DRD located near the WD's geographic location as determined by the network resource;

selecting only one DRD from said at least one publicly accessible DRD using said WD;

selecting data for rendering at said DRD using said WD; and transferring said data using said WD to said DRD for rendering.

106. (Previously amended) A location based service method using public wireless communications network resources to assist a user of a GPS-enabled hand held wireless device supported by the public wireless communications network to locate a publicly accessible data rendering device (DRD) whose location is not previously known to the user, said publicly accessible DRD comprising at least one of a video monitor, an Internet Kiosk, a multimedia projector, or an ATM machine, the method comprising the steps of:

receiving a request from a GPS-enabled hand held wireless device at a public wireless communications network resource for assistance in locating a publicly accessible DRD;

said public wireless communications network resource determining the GPS-enabled hand held wireless device's geographic location using GPS information provided from the GPS-enabled hand held wireless device;

 said public wireless communications network resource using the GPS-enabled hand held wireless device's geographic location to locate at least one publicly accessible DRD located near the GPS-enabled hand held wireless device;

 said public wireless communications network resource identifying the at least one publicly accessible DRD including its geographic and physical location to the GPS-enabled hand held wireless device; and

said public wireless communications network resource providing directions to the at least one publicly accessible DRD from the geographic location of said GPS-enabled hand held wireless device.

Theimer alone, or in combination with *Haartsen*, do not teach or suggest operations at longer than 32 feet distance. One skilled in the art would not be motivated to use *Theimer* alone, or in combination with *Haartsen*, to assist wireless data communications device users to request public data communications networks or public data communications network resources to located publicly accessible data rendering devices, comprising at least one of a video monitor, an Internet Kiosk, a multimedia projector, or an ATM machine, for the purpose of rendering data on behalf of the wireless device and its user wherein the location of the data rendering devices is not previously known by the wireless device or its user and the data rendering devices that are found are based on at least one of the wireless device's location or a wireless device user's profile.

Theimer alone, or in combination with *Haartsen*, are very limited in that they're each cited specifically for their teaching of short range data communications between electronic devices. The longest effective range possible given the combination of *Haartsen* with *Theimer* is 32 feet (10 meters), which is the effective range of Bluetooth™ wireless devices.

Theimer alone, or in combination with *Haartsen*, does not teach or suggest the use of public communications network provider resources to help a

wireless device user to locate publicly accessible data rendering devices, such as multimedia projectors, Kiosks, ATMs or video monitors. Applicant's specification and claimed invention assumes that the location of the data rendering device is not already known by the user or the user's handheld wireless device.

It cannot be emphasized enough that Applicant's claimed invention satisfies a long felt but unfulfilled need for roaming wireless device users such as business travelers to be able to find the unknown location of publicly available data rendering devices so that the roaming wireless device user can view or print electronic documents that are not easily viewable over their wireless handheld devices. *Theimer* in combination with *Haartsen* does not address or fulfill this need. *Theimer* in combination with *Haartsen* is only concerned about short range needs of wireless device users, where the location of electronic devices are impliedly known given the short effective range of the proposed combination (32feet/10meters). In fact the *Theimer* and *Haartsen* disclosures actually teaches away from Applicant's invention as claimed because the user of the combined art would actually know the physical location of devices and merely wishes to optimize or secure the transfer of data between them. The benefit of *Theimer* in combination with *Haartsen* may only be of benefit to a user of Applicant's methods at the very end of the process, after a publicly accessible DRD is located for the wireless device user, whereafter the user can use short range data linkages to transfer data from his/her wireless device to the DRD for rendering. This is so if the transfer wasn't instead executed through public network resources (e.g., mail, ftp transfer, etc.).

Applicant believes his amended claims must now help clarify the scope of his invention more than ever before for the Examiner; although he strongly feels that his claims prior to the current amendment overcame the rejections of record given the *Theimer/Haartsen* limitations. Applicant is confident that his claims should now finally overcome the *Theimer* reference in combination with *Haartsen* and are now allowable, and, furthermore, that his independent claims are also allowable over the cited references.

VI. Conclusion

In view of the foregoing remarks, the applicant submits that Claims 1-3, 7-9, 15-20, 22, 23, 30, 31, 89-93, 98-100, 105-107, 112, 113 and 115-117, which remain pending in the application, are patentably distinct over and not obviated by the references of record, and further that the claims are in allowable form. Accordingly, the applicants earnestly solicit the favorable consideration of his application, and respectfully request that it be passed to issue in its present condition.

A petition for one-month extension of time and associated fee are also being submitted together with the *third* RCE in this application and this paper.

Should the Examiner discern any remaining impediment to the prompt allowance of the aforementioned claims that might be resolved or overcome with the aid of a telephone conference, he is cordially invited to call the undersigned at the telephone number set out below.

Respectfully submitted,

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